

WHAT IS CLAIMED IS:

1. A method for forming at least one flat-tube insertion slot in a heat exchanger header tube suitable for use in an air-conditioning system, comprising:

making a sawcut in the header tube, the sawcut having a first length and a first width; and

configuring the flat-tube insertion slot by punching into the region of the sawcut with a slot punch, the slot punch having at least one of a larger width and larger length relative to the respective first width and first length of the sawcut, to thereby form a rimmed insertion slot having a rim on at least a portion of its periphery extending into the interior of the header tube.

2. A method as claimed in claim 1, wherein the sawcut is introduced to a depth (d_1) which is less than the wall thickness (D) of the header tube.

3. A method as claimed in claim 1, wherein the sawcut is made in a direction parallel to the axis of the header tube.

4. A method for forming at least one flat-tube insertion slot in a heat exchanger header tube suitable for use in an air-conditioning system, comprising:

making a sawcut in the header tube, wherein the sawcut is introduced to a depth (d_1) which is less than the wall thickness (D) of the header tube; and

configuring the flat-tube insertion slot by punching into the region

of the sawcut with a slot punch.

5. A method as claimed in claim 1, wherein the sawcut is substantially linear and has a first length a_1 and a first width b_1 .

6. A method as claimed in claim 1, wherein the header tube has a wall having a comparatively thick wall thickness suitable for use in a heat exchanger subjected to high pressure loading at the level used for systems utilizing CO₂ as a heat exchange agent.

7. A method as claimed in claim 1, wherein the step of making said sawcut comprises cutting the sawcut with a saw blade having a predetermined diameter and width.

8. A method as claimed in claim 4, wherein the sawcut is substantially linear and has a first length a_1 and a first width b_1 .

9. A method as claimed in claim 4, wherein the header tube has a wall having a comparatively thick wall thickness suitable for use in a heat exchanger subjected to high pressure loading at the level used for systems utilizing CO₂ as a heat exchange agent.

10. A method as claimed in claim 4, wherein the step of making said sawcut comprises cutting the sawcut with a saw blade having a predetermined diameter and width.